

## ABSTRACT OF THE DISCLOSURE

A bipolar transistor includes a collector that is selected from the group SiC and SiC polytypes (4H, 6H, 15R, 3C...), a base that is selected from the group Si, Ge and SiGe, at least a first emitter that is selected from the group Si, SiGe, SiC, amorphous-Si, amorphous-SiC and diamond-like carbon, and at least a second emitter that is selected from the group Si, SiGe, SiC, amorphous-Si, amorphous-SiC and diamond-like carbon. Direct-wafer-bonding is used to assemble the bipolar transistor. In an embodiment the bandgap of the collector, the bandgap of the at least a first emitter and the bandgap of the at least a second emitter are larger than the bandgap of the base.

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